



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,256	07/30/2003	Malcolm Woods	RD8345USNA	9399
43693	7590	11/16/2006	EXAMINER	
INVISTA NORTH AMERICA S.A.R.L. THREE LITTLE FALLS CENTRE/1052 2801 CENTERVILLE ROAD WILMINGTON, DE 19808				SALVATORE, LYNDA
ART UNIT		PAPER NUMBER		
		1771		

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/630,256	WOODS, MALCOLM
	<b>Examiner</b>	<b>Art Unit</b>
	Lynda M. Salvatore	1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 30 August 2006.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-11 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:
 

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment and accompanying remarks filed 8/30/06 have been fully considered and entered. Claims 1,2 and 7 have been amended and new claims 10 and 11 have been added as requested. Applicant's amendment to claim 1 is found sufficient to overcome the obviousness rejections set forth in sections 2-5 of the Office Action dated 6/02/06. Specifically, the combination of prior art fails to teach the limitation of providing side-by-side bicomponent fibers. As such, these rejections are hereby withdrawn. However, Applicant's amendments are not found patently distinguishable and upon further consideration the following necessitated new ground of rejection are set forth herein below.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al., US 4,977,016 in view of Matsushima et al., US 5,618,595.

The patent issued to Thornton et al., teach a woven fabric having an air permeability of not more than  $1 \text{ cm}^3/\text{sec}/\text{cm}^2$  (abstract). Thornton et al., teach that the woven fabric is calendered on both sides to reduce permeability (abstract). With regard to claim 2, Thornton et al., teach a basis weight of not more than  $280 \text{ gm}/\text{m}^2$  (column 2, 45-50). Thus, with specific regard to claim 10, the Examiner considers the recitation of "not more than" to include basis weights of less than  $280 \text{ gm}/\text{m}^2$  and thus meets the limitation of claim 10 (column 8, 10-15). Thornton et al., teach that the low permeability fabric is suitable in the formation of an air bag (column 1, 14-37).

Thornton et al., fail to teach employing synthetic bicomponent fibers in the woven fabric, however, the patent issued to Matsushima et al., teaches an airbag comprising side-by-side bicomponent fibers comprising polyester or polyamide (column 4, 25-45). Matsushima et al., teach that such bicomponent fibers impart airtight properties to the airbag (column 4, 50-60).

Therefore, motivated by the desire to provide an airbag with airtight properties, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the woven fabric of Thornton et al., with the side-by-side bicomponent filaments of Matsushima et al.

4. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al., US 4,977,016 in view of Matsushima et al., US 5,618,595 as applied to claim 1 above and further in view of Kamihashi et al., JP 408158160 A.

The combination of Thornton et al., in view of Matsushima et al., fails to teach the claimed nylon materials, however, the published JP abstract teaches a conjugate fiber suitable for use in the formation of an air bag. The JP abstract teaches nylon 6 and nylon 46 having a sheath core arrangement. Said fiber exhibits sufficient strength, heat resistance, fatigue resistance, and flexibility.

Therefore, motivated by the desire to provide an air bag with sufficient strength, heat resistance, fatigue resistance, and flexibility, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the woven fabric provided by the combination of Thornton et al., in view of Matsushima et al., with the nylon materials taught in the published JP abstract.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al., US 4,977,016 in view of in view of Matsushima et al., US 5,618,595 as applied to claim 1 above, and further in view of Hashimoto et al., JP 408134721 A.

The combination of Thornton et al., in view of Matsushima et al., fails to teach the claimed polymer materials set forth in claim 4, however, the published JP abstract teaches a conjugate fiber suitable for use in the formation of an air bag. The JP abstract teaches polyethylene terephthalate in a sheath core arrangement. Said fiber imparts mechanical and flexibility properties to woven fabrics.

Therefore, motivated by the desire to provide an air bag with mechanical and flexibility properties, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the woven fabric provided by the combination of Thornton et al., in view of Matsushima et al., with the polymer materials taught in the published JP abstract.

6. Claims 6-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al., US 4,977,016 in view of in view of Matsushima et al., US 5,618,595 as applied to claim 1 above, and further in view of JP 05148703 A.

The combination of Thornton et al., in view of Matsushima et al., fails to specifically teach adding the claimed ultraviolet absorbing agent to the filament materials; however, ultraviolet agents are commonly added to provide protection against UV rays. For example, the published Japanese abstract teaches a cloth comprising conjugate fibers containing 1% by weight of the ultraviolet absorber titanium oxide (Abstract).

Therefore, motivated by the desire to provide a fabric with protection from ultraviolet rays, it would have been obvious to one having ordinary skill in the art at the time the invention

was made to form the conjugate filaments of Matsushima et al., in the woven fabric of Thornton et al., with the amount of titanium oxide ultraviolet absorbing agent taught in the published Japanese abstract.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

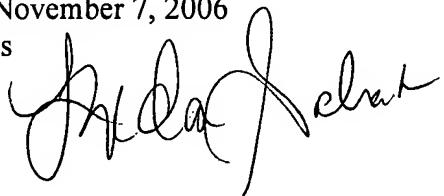
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 7, 2006

ls

A handwritten signature in black ink, appearing to read "Linda S. Clark".